

**COMPARATIVE EFFECTIVENESS OF COGNITIVE BEHAVIOURAL
THERAPY COMBINED WITH MOTIVATIONAL ENHANCEMENT
THERAPY VERSUS COGNITIVE BEHAVIOURAL THERAPY ALONE
IN MANAGING CANNABIS USE SEVERITY AMONG PATIENTS AT
SELECTED METHADONE CLINICS IN KIAMBU COUNTY, KENYA**

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Requirements for the Award of the Degree of Master of Science in Clinical
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DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented for an award of diploma or conferment of a degree in any other University.

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Recommendation

This thesis has been examined, passed and submitted with our approval as university supervisors.

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DEDICATION

I dedicate this thesis to all R4E individuals and families still struggling with mental health issues particularly cannabis use disorder in silence, your voices need to be heard and your experience valued. This study is also dedicated to the mental health professionals, addiction counsellors and researchers who are dedicated so much to better the lives of the people living with substance use disorder in order to give them hope and bring change in their lives. Lastly, to my family and mentors that I love, thank you very much, you have taught me that no matter how big the task is, it is possible to do it one step at a time.

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ABSTRACT

Cannabis Use Disorder (CUD) is an increasing epidemiological issue in the world. The world prevalence of cannabis use is 12.0 percent in those countries where cannabis has been legalized and 5.4 percent in countries where cannabis is not legal. Lifetime prevalence of cannabis use amongst Kenyan people age 15-65 is 3.4%. Poor treatment outcomes have been linked to continued use of cannabis by patients under methadone therapy. Cognitive Behavioural therapy (CBT) is an evidence-based intervention to substance use disorders; it will be more effective when paired with motivational enhancement therapy (MET). This is a cluster randomized controlled trial study design which evaluated the comparative efficacy of CBT+MET and CBT in the treatment of the severity of cannabis use disorder. Forty-nine patients who met the inclusion criterion were enrolled. The study involved cluster-randomization in which the groups of interventions group were assigned CBT+MET (n=33) at Ruiru and the control group engaged in CBT only (n=16) at Karuri methadone clinic. Within group change in scores was tested using paired sample t-tests and between group change after the intervention was tested using independent sample t-test. Diagnostic and Statistical Manual of Mental Disorders-5 (DSM -5) diagnostic criteria on Cannabis Use Disorder symptom checklist were used to measure the outcomes of cannabis use disorder severity scores at baseline and post-treatment. The improvements in both interventions were statistically significant ($p < 0.001$) and CBT+MET demonstrated higher therapeutic improvement (mean reduction: 6.21 points, Cohens $d = 4.08$) than CBT alone (mean reduction: 4.26 points, Cohens $d = 2.22$). Clinical significance analysis showed that CBT + MET intervention exhibited superior clinical results with the post-treatment mean of 2.15 (SD = 1.25). Most significantly, there was no severe category threshold at which all participants scored below that mark, and 42.4% scored no disorder category. The CBT only group posttreatment assessment showed significant therapeutic improvements with mean score change to 4.50 (SD = 1.90). Although 56% of the participants showed clinical improvement as a result of transitioning to moderate or no disorder categories, 44% were still in the severe range, which means that further intervention is necessary. The sociodemographic characteristics had no statistical significance with Cannabis Use Disorder. The results elicit solid support on the implementation of motivational enhancement factors, in addition to cognitive-Behavioural therapies within the addiction setting, to encourage an implementation of both CBT and motivational enhancement therapy model within methadone maintenance programs in Kenya and resource-constrained settings.